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PATENT

Attorney Docket No. **SPRUSON-09811**

10/530798

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	John E. Hunt *et al.*	
Serial No.:	10/530,798	Group No.:
Filed:	04/08/2005	Examiner:
Entitled:	**Tryptase Polypeptides And Uses Thereof**	

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1.8(a)(1)(i)(A)

I hereby certify that this correspondence (along with any referred to as being attached or enclosed) is, on the date shown below, being deposited with the U.S. Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Dated: November 30, 2005 By: _____
Cliff Cannon-Cin

Dear Sir or Madam:

The citations listed below, copies attached, may be material to the examination of the above-identified application, and are therefore submitted in compliance with the duty of disclosure defined in 37 C.F.R. § 1.56 and § 1.97. The Examiner is requested to make these citations of official record in this application:

- U.S. Patent No. 5,656,660 to Lum *et al.*, "Compositions and methods for treating mast-cell mediated conditions," (1997);
- U.S Patent No. 5,955,431 of Stevens *et al.*, "Mast cell protease peptide inhibitors," (1999);
- U.S. Patent No. 5,968,782 of Stevens, "Mast cell protease that cleaves fibrinogen," (1999);
- U.S. Patent No. 6,388,122 of Kido *et al.*, "Tryptase inhibitors and novel guanidine derivatives," (2002);

- U.S. Patent App. Pub. No. US 2001/0053779 of Church *et al.*, "Novel compounds and compositions for treating disease associated with protease activity," (2001);
- U.S. Patent App. Pub. No. US 2002/0026654 of Allen *et al.*, "Transgenic mice containing tryptase gene disruptions," (2002);
- U.S. Patent App. Pub. No. US 2002/0110895 of Darrow *et al.*, "DNA encoding the human serine protease EOS," (2002);
- International Patent App. Pub. No. WO 02/12196 of Bisacchi *et al.*, "Lactam compounds and their use as inhibitors of serine proteases and method," (2002);
- Butterfield *et al.*, "Purification of tryptase from a human mast cell line," *J Leuk Biol*, 47:409-419 (1990);
- Caughey *et al.*, "Characterization of human γ-tryptases, novel members of the chromosome 16p mast cell tryptase and prostasin gene families, *J Immunol,* 164:6566-6575 (2000);
- Daniels *et al.*, "Sequence, structure and pathology of the fully annotated terminal 2Mb of the short arm of human chromosome 16," *Hum Mol Genet,* 10:339-352 (2001);
- Fields and Song, "A novel genetic system to detect protein-protein interactions," *Nature,* 340:245-246 (1989);
- Flanagan and Leder, "The *kit* ligand: a cell surface molecule altered in steel mutant fibroblasts," *Cell,* 63:185-194 (1990);
- Harris et al., "Definition of the extended substrate specificity determinants for β-tryptases I and II," *J Biol Chem,* 276:24941-34947 (2001);
- Huang *et al.*, "Human tryptases α and β/II are functionally distinct, due in part to a single amino acid difference in one of the surface loops that forms the substrate binding cleft," *J Biol Chem,* 274:19670-19676 (1999);
- Huang *et al.*, "Formation of enzymatically active, homotypic, and heterotypic tetramer of mouse mast cell tryptases," *J Biol Chem*, 275:351-358 (2000);
- McNeil *et al.*, "Isolation, characterization, and transcription of the gene encoding mouse mast cell protease 7," *Proc Natl Acad Sci USA*, 89:11174-11178 (1992);

- Min *et al.*, "Human mouse mast cell protease 7-like tryptase genes are pseudogenes," *J Allergy Clin Immunol,* 107:315-321 (2001);
- Pallaoro *et al.*, "Characterization of genes encoding known and novel human mast cell tryptases," *J Biol Chem*, 274:3355-3362 (1999);
- Park *et al.*, "Promoted expression of mast cell-specific proteases in IgE-dependent passive cutaneous anaphylaxis responses," *Clinica Chimica Acta*, 314:231-236 (2001);
- Pereira *et al.*, "Human β-tryptase is a ring-like tetramer with active sites facing a central pore," *Nature,* 392:306-311 (1998);
- Poonyachoti and Brown, "δ-opioid receptors inhibit neurogenic intestinal secretion evoked by mast cell degranulation and type I hypersensitivity," *J Neuroimmunol*, 112:89-96 (2001);
- Wang *et al.*, "δ tryptase is expressed in multiple human tissues, and a recombinant form has proteolytic activity," *J Immunol,* 169:5145-5152 (2002);
- Wong *et al.*, "Identification of a new member of the tryptase family of mouse and human mast cell proteases which possesses a novel COOH-terminal hydrophobic extension," *J Biol Chem*, 274:30784-30793 (1999);
- Wong *et al.*, "Tryptase 4, a new member of the chromosome 17 family of mouse serine proteases," *J Biol Chem,* 276:20648-20658 (2001);
- Wong *et al.*, "Human tryptase ε (PRSS22), a new member of the chromosome 16p13.3 family of human serine proteases expressed in airway epithelial cells," *J Biol Chem*, 276:49169-49182 (2001);
- GenBank Accession No. AAD17845 (1998);
- GenBank Accession No. AAK12909 (2000);
- GenBank Accession No. AAK61272 (2000);
- GenBank Accession No. NP_036349 (1999); and
- GenBank Accession No. Q9BZJ3 (1999).

This Information Disclosure Statement under 37 C.F.R. § 1.56 and § 1.97 is not to be construed as a representation that a search has been made, that additional information material to the examination of this application does not exist, or that any one or more of these citations constitutes prior art.

Dated: November 30, 2005

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FORM PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney Docket No.: SPRUSON-09811	Serial No.: 10/530,798
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use Several Sheets If Necessary) (37 CFR § 1.98(b))		Applicant: John E. Hunt *et al.*	
		Filing or 371(c) Date: 04/08/2005	Group Art Unit: to be assigned

U.S. PATENT DOCUMENTS

Examiner Initials	Cite No.	Serial / Patent Number	Publication / Issue Date	Applicant / Patentee	Class	Subclass	Filing Date
	1	5,656,660	08/12/97	Lum *et al.*	514	467	05/31/95
	2	5,955,431	09/21/99	Stevens *et al.*	514	17	01/30/98
	3	5,968,782	10/19/99	Stevens	435	69.7	11/25/97
	4	6,388,122	05/14/02	Kido *et al.*	560	34	10/07/98
	5	2001/0053779	12/20/01	Church *et al.*	514	248	06/04/01
	6	2002/0026654	02/28/02	Allen *et al.*	800	18	07/06/01
	7	2002/0110895	08/15/02	Darrow *et al.*	435	226	01/08/02

FOREIGN PATENTS OR PUBLISHED FOREIGN PATENT APPLICATIONS

		Document Number	Publication Date	Country / Patent Office	Class	Subclass	Translation	
							Yes	No
	8	WO 02/12196	02/14/02	PCT				

OTHER DOCUMENTS (Including Author, Title, Date, Relevant Pages, Place of Publication)

	9	Butterfield *et al.*, "Purification of tryptase from a human mast cell line," *J Leuk Biol*, 47:409-419 (1990)
	10	Caughey *et al.*, "Characterization of human γ-tryptases, novel members of the chromosome 16p mast cell tryptase and prostasin gene families, *J Immunol*, 164:6566-6575 (2000)
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	29	GenBank Accession No. AAK61272 (2000)
	30	GenBank Accession No. NP_036349 (1999)
	31	GenBank Accession No. Q9BZJ3 (1999)

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